

Title (en)

Rehabilitation device, control method, control program, and recording medium

Title (de)

Rehabilitationsvorrichtung, Steuerungsverfahren, Steuerungsprogramm und Aufzeichnungsmedium

Title (fr)

Dispositif de réhabilitation, procédé de commande, programme de commande et support d'enregistrement

Publication

EP 2818150 A1 20141231 (EN)

Application

EP 14174711 A 20140627

Priority

JP 2013134645 A 20130627

Abstract (en)

A rehabilitation device includes: an operation unit (2) operated by a patient under rehabilitation; an operation amount detection unit (3) that detects an operation amount of the operation unit (2); a driving unit (4) that applies torque to the operation unit (2); a control unit (7) that controls driving of the driving unit (4); and a movement state detection unit (6) that detects a movement state of a moving part of the patient. The control unit (7) calculates a target value of the operation amount to be performed on the operation unit (2) based on the movement state detected by the movement state detection unit (6) and a predetermined movement model and controls the driving unit (4) so that the operation amount detected by the operation amount detection unit (3) follows the calculated target value of the operation amount.

IPC 8 full level

A61H 1/02 (2006.01)

CPC (source: EP US)

A61H 1/0237 (2013.01 - EP US); **A61H 1/0274** (2013.01 - EP US); **A63B 24/0087** (2013.01 - US); **A61H 2201/5058** (2013.01 - EP US); **A63B 2230/00** (2013.01 - US)

Citation (applicant)

JP 2007185325 A 20070726 - NAGOYA INST TECHNOLOGY

Citation (search report)

- [X1] US 2009259338 A1 20091015 - TONG KAIYU [CN], et al
- [X1] US 2004106881 A1 20040603 - MCBEAN JOHN M [US], et al
- [X1] US 2008294074 A1 20081127 - TONG KAI YU [HK], et al
- [X1] WO 2009125397 A2 20091015 - MOTORIKA LTD [GB], et al
- [X1] EP 1723941 A1 20061122 - SANKAI YOSHIYUKI [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2818150 A1 20141231; **EP 2818150 B1 20180221**; JP 2015008776 A 20150119; JP 5898134 B2 20160406; US 10343016 B2 20190709; US 2015005138 A1 20150101

DOCDB simple family (application)

EP 14174711 A 20140627; JP 2013134645 A 20130627; US 201414312943 A 20140624